

PROCEEDINGS
OF THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON.

VOL. XII OCTOBER - DECEMBER, 1910 No. 4

NOTES ON MEGALOPYGIDÆ.

[Lepidoptera; Megalopygidæ.]

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The types of two species described as *Carama* prove on examination not to belong to the Megalopygidæ. They are the following:

Mænas flavescens Schaus.

Carama flavescens Schaus, Journ. N. Y. Ent. Soc., iv, 57, 1896.

The single female type belongs to the genus *Mænas* in the Arctiidæ. It appears to be distinct from any of the described species recorded by Hampson.

Caviria grisea Schaus.

Carama grisea Schaus, Journ. N. Y. Ent. Soc., iv, 57, 1896.

The single male type belongs to the genus *Caviria* in the Liparidæ. It is a stout species, allied to *Caviria tibialis* Walker.

The table of genera of Megalopygidæ which was published by Mr. Schaus (Proc. U. S. Nat. Mus., xxix, 333, 1905), has proved unsatisfactory, because the primary character there used, the degree of anastomosing of vein 8 with the cell, differs in the sexes of the same species and is besides somewhat variable. I have therefore eliminated this character, with the result given below. I formerly proposed a family, Aididæ, for *Aidos* and *Brachycodilla*, but this group has not been accepted, and I therefore include the genera here. I think really that the family should stand, for according to Hampson's latest table (Cat. Lep. Phal., i, 19, 1898) it falls between the Cossidæ and Dalceridæ, to neither of which do the genera seem to belong.

TABLE OF GENERA.

- Hind wing with vein 8 not anastomosing with the cell, free or joined by a bar at end of cell (Aididæ):
- Hind wing with vein 8 free..... *Aidos* Hübner
- Hind wing with vein 8 joined to the cell by a bar.
- Brachycodilla* Dyar
- Hind wing with vein 8 anastomosing with the cell (Megalopygidæ):
- Fore wing with veins 4 and 5 stalked or connate.
- Hind wing with veins 3 and 4 stalked or connate.
- Antennæ short, less than half the length of fore wing.
- Gois* Dyar
- Antennæ long, over half the length of fore wing... *Ramaca* Dyar
- Hind wings with veins 3 and 4 separate *Mesoëia* Hübner
- Fore wing with veins 4 and 5 separate.
- Hind wing with veins 3 and 4 stalked or approximate at origin.
- Antennæ short, less than half the length of fore wing.
- Wings normal, trigonate.
- Fore wings with 12 veins.
- Antennæ moderate, about half as long as the fore wing *Norape* Walker
- Antennæ very short, about one-third as long as fore wing..... *Repnoa* Dyar
- Fore wings with 11 veins, vein 8 absent.... *Microrape* Dyar
- Wings short, rounded *Cyclara* Schaus
- Antennæ long, over half the length of fore wing; branch of vein 1 obscure.
- Hind wings with veins 6 and 7 remote.
- Hind wing with vein 8 anastomosing with cell to near end *Sulychra* Butler
- Hind wing with vein 8 anastomosing with cell shortly near base *Bedalia* Dyar
- Hind wing with veins 6 and 7 approximate... *Anarchylus* Dyar
- Hind wing with veins 3 and 4 separate.
- Frenulum distinct, with a costal loop in the male.
- Thorax strongly prominent before the wings.
- Outer margin normal; vein 1 with a strong branch.
- Podalia* Walker
- Outer margin of fore wing very long; vein 1 sinuate, without a distinct branch..... *Edebessa* Walker
- Thorax not strongly prominent.
- Stem of veins 7-10 bent downward toward 6.
- Archylus* Walker
- Stem of veins 7-10 not so bent.
- Antennæ long, over half the length of fore wing.
- Malmis* Dyar

Antennæ long, about half the length of fore wing.

Trosia Hübner

Antennæ short, less than half the length of fore wing.

Vein 10 present, 11 free *Hysterocladia* Felder

Vein 10 absent, 11 anastomosing with 12 . *Vescoa* Dyar

Frenulum obsolete, without costal loop in the male.

Antennæ long, over half the length of fore wing.. *Lagoa* Harris

Antennæ short, less than half the length of fore wing.

Megalopyge Hübner

Genus NORAPE Walker.

Norape Walker, Cat. Lep. Het. Brit. Mus., iii, 774, 1855, type, *puella* Walker.

Carama Walker, Cat. Lep. Het. Brit. Mus., iv, 843, 1855; type, *sparshalli* Curtis.

Mallotodesma Wallengrén, Vet. Akad. Handl., xv, 212, 1858; type, *discrepans* Wallengrén.

Ulosota Grote, Proc. Ent. Soc. Phil., iii, 524, 1864; type, *cretata* Grote.

The familiar name *Carama* can no longer be used for these species. It is antedated by *Norape* Walker; but it is not properly available in any case. Walker founded the genus upon what he supposed was *sparshalli* Curtis, and *sparshalli* should therefore be taken as the type, whatever may have been actually before Walker at the time. He has specified *sparshalli* as the type, being the only included species, and this action is more vital to nomenclature than his descriptions. *Sparshalli* appears to be an Australian species. *Carama* will therefore become a synonym of *Trichetra* Westwood.

Norape ovina Sepp.

Phalæna ovina Sepp, Surin. Vlind., iii, pl. 105, 1852.

Carama sparshalli Walker (not Curtis), Cat. Lep. Het. Brit. Mus., iv, 844, 1855.

Mallotodesma discrepans Wallengrén, Wien. Ent. Mon., iv, 163, 1860.

Lagoa (Ulosota) cretata Grote, Proc. Ent. Soc. Phil., iii, 524, 1864.

Carama walkeri Butler, Cist. Ent., ii, 203, 1877.

Carama cretata Dyar, Bull. 52, U. S. Nat. Mus., 358, 1903.

In this species the wings are crossed by lines of appressed scales, giving a striped, silvery appearance to the white surface; the head and abdominal tufts are tipped with yellow;

front and pectus smoky brown; tarsi white; male antennæ reddish ochreous. It is the largest species.

I am unable to distinguish our North American *Carama cretata* from this widely distributed form. Mexican specimens are of about the same size as those from Washington, D. C., but farther south they get larger. My largest specimens are from British Guiana. Southward in Brazil they are again a little smaller, about the size of Costa Rican examples.

I have given *Carama pura* Butler as a synonym of this species, but am inclined at present to consider it distinct. Sepp mentions no yellow color, but this is often obscure in females. The size and striped appearance of the wings, which he represents, compel the present identification.

Norape plumosa Butler.

Carama plumosa Butler, Cist. Ent., ii, 204, 1877.

Carama plumosa Kirby, Cat. Lep. Het., 436, 1892.

This is probably only a variety of *ovina*. Butler separates it by being smaller, with the anterior legs black on one side. The size is of no account, while the amount of black on the fore legs is variable. In Guiana specimens the femora are black, tibiæ and tarsi white; in Venezuelan, Mexican, and North American specimens the tibiæ also are black on one side, while in Brazilian and occasional Mexican specimens the tarsi also are invaded by the dark color. There is a tendency toward an increase of black on the fore legs toward both extremes of the range of the species, most pronounced toward the southern extreme. It is these southern or Brazilian specimens on which *plumosa* was founded.

Mr. Schaus has recently sent to the National Museum some specimens from Costa Rica, which he identifies as *plumosa* Butler; but with this identification I am inclined to disagree. I consider the specimens to belong to *pura* Butler, as they have no yellow on the abdomen, nor bands of shining scales on the wings. However, as I have not compared Butler's type, Mr. Schaus may be right. Differences of opinion may easily arise with these closely allied forms. See the remark under *N. catharus* below.

Norape hadaca, new species.

Vertex of head yellow, abdomen pure white; front legs black on one side to the tips. Expanse, 33 to 37 mm.

Two males, Motzorongo, Mexico, June, 1906 (R. Müller); Mexico, without definite locality (H. T. Heyde).

Type: No. 13105, U. S. National Museum.

This has the same striped wings as the preceding, but has no yellow on the abdomen. I have another male from Motzorongo with yellow on the abdomen and with black front legs, but it is the specimen referred to above as "occasional Mexican specimens" of *plumosa*. Possibly the yellow of the abdomen should be considered as the variable character and the forms separated on the color of the fore legs, in which case we would have *ovina* (typical) in the Guianas, giving off the race *plumosa* in Brazil and the race *cretata* from Venezuela to North America. The form *hadaca* would then rank as a species. Possibly also the yellow-marked specimen is another species, but I hesitate to so refer it with but one specimen before me.

Norape virgo Butler.

Carama virgo Butler, Cist. Ent., ii, 203, 1877.

Carama virgo Kirby, Cat. Lep. Het., 436, 1892.

Carama virgo Dyar, Brookl. Inst. Mus., Sci. Bull. i, 8, 8, 1906.

This species has the same striped effect of the fore wings, but the tarsi of all the feet are black. The vertex of the head and the abdomen are tinged with yellow. The species ranges from southwestern Texas through Mexico to Costa Rica. The southern specimens are the largest, which indicates that the species is most at home in Central America. I should therefore expect its range to extend into South America. Such is apparently the case, as Butler gives one of his localities as "New Granada" (= Colombia).

Norape puella Walker.

Norape puella Walker, Cat. Lep. Het. Brit. Mus., iii, 775, 1855.

The striped effect of the wings is well marked, but the species is of a more slender build than those heretofore considered. The black, wedge-shaped streaks between the veins of the fore wing make the species easily recognizable. Walker placed the genus in the Arctiidæ and was followed by Kirby in his catalogue (1892), but Schaus correctly refers it to the Megalopygidæ (1900). The white species of Arctiidæ, Liparidæ, Cochlidiidæ, and Megalopygidæ have been very confusing to the older authors and to some later ones, too.

Norape venata Schaus.

Norape venata Schaus, Journ. N. Y. Ent. Soc., viii, 230, 1900.

This species is of the usual structure, the body parts rather stout. The striped effect of the wings is slightly indicated, but is nearly lost. The longitudinal gray streaks between the veins are characteristic.

Norape butleri Baker.

Carama butleri Baker, Trans. Ent. Soc. Lond., 133, 1887.

In this species the head and abdomen are pure white without yellow tint. I have this form from Brazil, Trinidad, the Guianas, and Mexico. No specimens are before me from Central America, though it undoubtedly occurs there. The species is of medium size and without any yellow. The wings are smooth, without the banded effect, which is lacking also in all the following species.

Norape miasma, new species.

Similar to *butleri*, but of an impure yellowish white throughout. The hind wings are somewhat whiter than the fore wings. The front is white, the pectus black. All the tarsi are tinted with dusky beneath, though white on top.

Six males, four females, Castro, Parana, Brazil (Schaus collection).

Type: No. 13106, U. S. National Museum.

Norape pura Butler.

Carama pura Butler, Trans. Ent. Soc. Lond., 64, 1878.

This differs from *butleri* only in that the head is yellow on the vertex. It has the same range. My specimens are from Brazil, the Guianas, Venezuela, Panama, Costa Rica, and Mexico. I do not know how constant the yellow coloration is. This can only be proved by breeding.

Norape catharus, new species.

Pure white; front white, vertex and antennal tufts yellow; abdomen tinged with yellow dorsally; lower part of front and pectus brown; fore legs blackish on one side; all the tarsi tinged with brown beneath. Expanse 37 mm.

Two males, Sapucay, Paraguay (W. T. Foster).

Type: No. 13107, U. S. National Museum.

This would seem to be the species indicated by Baker as *plumosa* Butler (Trans. Ent. Soc. Lond., 134, 1887), but Butler in his original description says that *plumosa* only differs from *walkeri* (= *ovina*) in its smaller size and the black upper surface of the anterior pair of legs. I have therefore referred it to the specimens so characterized.

Norape flammicornis Schaus.

Carama flammicornis Schaus, Proc. U. S. Nat. Mus., xxix, 334, 1905.

Antennæ red; a black costal edge to fore wing; all the tarsi are black, but there is no yellow color on the insect. The wings are smooth.

Norape laticosta, new species.

Pure white; costa of fore wing broadly black above and below; palpi, orbits, pectus, and all tarsi black; antennæ dull red, the shaft partly white-scaled; head with a little yellow tint. Expanse 28 mm.

Three males, Iguala, Guerrero, Mexico, June, 1906 (W. Schaus).

Type: No. 13108, U. S. National Museum.

Norape tener Druce.

Archylus tener Druce, Biol. Cent.-Am. Lep. Het., ii, 411, 1897.

The single type specimen has veins 3 and 4 of hind wing connate, 4 and 5 of fore wing separate, although very shortly so. It therefore must be placed in this genus. The Arizona form, supposed to be the same as the Mexican *tener*, is referred to here under the genus *Ramaca*.

Norape alydda Druce.

Alpis alydda Druce, Biol. Cent.-Am. Lep. Het., i, 210, 1887.

I have a single specimen from Ecuador in poor condition, but apparently this species. The type locality is Costa Rica. If the species are the same the above generic reference will obtain. A specimen kindly sent by Mr. Schaus from Costa Rica proves the present reference correct.

Genus MICRORAPE, new.

Proposed for *Carama minuta* Druce (Biol. Cent.-Am., Lep. Het., i, 168, 1886), which differs from *Norape* Walker in the loss of vein 8 of fore wings. Sole species, *Microrape minuta* Druce. Mr. Schaus has presented the National Museum with a specimen of this species collected by himself in Costa Rica.

Genus REPNOA, new.

Proposed for *Carama imparilis* Schaus, which differs from the species of *Carama* (= *Norape*) in the short antennæ.

Repnoa imparilis Schaus.

Carama imparilis Schaus, Proc. U. S. Nat. Mus., xxxix, 334, 1905.

This peculiar species is easily recognized by the dark gray wings with the veins and fringe white. The abdomen is black with a yellow tuft at base and tip. Only the single male type is known to me.

In this genus may also be placed *dimidiata* Walker, *thanatos* Schaus, *amarga* Schaus, and *tympania* Druce, though the latter has the antennæ a little long. The genus *Gois* Dyar, with its single species *nigrescens* Schaus, will immediately follow these.

Genus HYSTEROCLADIA Felder.

Hysterocladia Felder, Reise Novara, Lep., 5, 1874.

Hysterocladia corallocera Felder.

Hysterocladia corallocera, Reise Novara, pl. 99, fig. 13, 1874.

Trosia ignicornis Schaus, Proc. U. S. Nat. Mus., xxxix, 335, 1905.

I think that *ignicornis* is the male of *corallocera*, although no female specimens are before me. The pure white little moth with the bright coral-red antennæ seems characteristic.

Genus ARCHYLUS Walker.

Archylus Walker, Cat. Lep. Het. Brit. Mus., vii, 1718, 1856.

The type species, *guttifascia* Walker, is a megalopygid, and forms a distinct genus. None of the other species referred here, which I know, are congeneric. *Archylus nigrisparsus* Butler is a liparid, genus *Caviria*. *Archylus mexicana* Schaus and *A. vesta* Schaus are Megalopygidæ, but separable generically. *Archylus tener* Druce also comes in another genus.

Genus ANARCHYLUS Dyar.

Anarchylus Dyar, Proc. U. S. Nat. Mus., xxix, 177, 1905.

Anarchylus mexicana, the type species, is the only one of the genus known at present.

Genus SULYCHRA Butler.

Sulychra Butler, Trans. Ent. Soc. Lond., 64, 1878.

Sulychra Schaus, Proc. U. S. Nat. Mus., xxix, 333, 1905.

This genus was described in the Liparidæ. The type species, *argentea* Butler, has the male silvery white, but the female pale mouse-gray.

Sulychra vesta Schaus.

Archylus vesta Schaus, Proc. Zool. Soc. Lond., 289, 1892.

Silvery white, with slender body, long testaceous antennæ, the vertex of head yellow. The wings have the impressed, banded appearance of the species first treated here under *Norape*.

Genus TROSIA Hubner.

- Trosia* Hübner, Verz. bek. Schmett., 196, 1816; type, *tricolora* Fabricius.
Sciathos Walker, Cat. Lep. Het. Brit. Mus., iii, 752, 1855; type, *punctigera* Stoll.
Endobrachys Felder, Reise Novara, pl. 83, fig. 17, 1874; type, *revocans* Felder.
Isochroma Felder, Reise Novara, pl. 83, fig. 18, 1874; type, *fallax* Felder.

The typically marked species of *Trosia* are very distinct, with red abdomen and hind wings and row of dots across fore wings. There are three rather common and widely distributed species, but their nomenclature is much involved. The largest species has the fore wings white in the male, overspread with a gray and rosy shade beyond the cell. The wings are produced, the inner margin being nearly parallel to the costa. This is *punctigera* Stoll. The other two species have the wings more trigonate and uniformly colored. In one (*dimas* Cramer), the wings are white, in the other (*misda* Schaus) they are ochre yellow. Several variations of the type occur, of which *incostata* Schaus, without the costal stripe, *rosi-puncta* Druce, with the spots red, and *albida* Dognin, with the hind wings white, are before me.

The second group of *Trosia* is composed of a number of white species such as *nigripes* Dyar, *purens* Schaus, and *parva* Schaus, that look like species of *Norape* and are probably closely allied to that genus, but the venation is still too generalized to allow of their inclusion in that genus.

The third group consists of one species, *acca* Schaus (= *ribbei* Druce), with red body and hind wings, the fore wings rather thinly scaled, brown, with the veins indicated in darker color.

The fourth group (*Endobrachys* Felder) has the wings much elongated, the coloration of longitudinal shadings. This is obviously derived from some such form as *punctigera* in the first group.

The fifth group comprises *habitus* Hy. Edwards (= *contigua* Walker, according to Druce) and *gamelia* Druce. These species are aberrant in the genus, but the presence of a distinct frenulum excludes them from *Megalopyge*.

Trosia punctigera Stoll.

Phalæna bombyx punctigera Stoll, Suppl. Cramer's Pap. Exot., pl. 34, 1790.

Sciathos punctigera Walker, Cat. Lep. Het. Brit. Mus., iii, 752, 1855.

Sciathos punctigera Druce, Biol. Cent.-Am., Lep. Het., i, 212, 1887.

Sciathos punctigera Kirby, Cat. Lep. Het., 540, 1892.

Druce gives *Isochroma fallax* Felder as a synonym of this species, but Felder figures the fore wings and thorax of a blue gray, too highly colored, but clearly different from *punctigera*. Kirby adds *Bombyx tricolora* as a synonym, but this is the small white species, as Fabricius plainly describes. Kirby has, through the similarity of names, confounded *punctigera* of Stoll with *punctigera* of Linnæus. The latter is "Phalæna Noctua" and has a spiral tongue, evidently of an entirely different family. Moreover, it is described from the Indies.

Specimens from Brazil, the Guianas, and Central America are large and fully colored. Those from Mexico are smaller and have more or less white on the discal area of the hind wings both above and below. For the latter I propose the varietal name *amala*.

Type locality: Cordoba, Mexico.

Type: No. 13547, U. S. National Museum.

Trosia fallax Felder.

Isochroma fallax Felder, Reise Novara, pl. 83, ff. 18, 19, 1874.

In this species there is no white on the fore wings, the rosy shading covering the surface except for its gray outer margin and red costa. The gray margin shows plainly on the fore wings beneath, which are red in *punctigera*. Mr. Schaus has sent two males from Costa Rica and I have a female from Panama. (C. L. Pollard).

Trosia dimas Cramer.

Phalæna bombyx dimas Cramer, Pap. Exot., pl. lix, fig. c, 1775.

Bombyx tricolora Fabricius, Mant. Ins., ii, 114, 1787.

Trosia dimas Hübner, Verz. bek. Schmett., 196, 1816.

Chrysaugæ dimas Walker, Cat. Lep. Het. Brit. Mus., ii, 375, 1854.

Idalus dimas Kirby, Cat. Lep. Het., 198, 1892.

Sciathos dimas Druce, Biol. Cent.-Am., Lep. Het., ii, 440, 1897.

There is no doubt that this is the species described by Fabricius, the type locality being French Guiana. Cramer's

figure, however, if it is really this insect, is misleading, with its small, frail body, white thorax and abdomen, without spots. The locality also, West Indies, is wrong, as all the specimens that I have seen are from the mainland, from Brazil to Costa Rica.

Trosia misda Schaus.

Edebossa misda Schaus MS.

In this the fore wings and thorax are pale ocher yellow, the costa, vertex, thoracic spots, abdomen, and hind wings bright red. The row of spots across the fore wing is black. The species has the wing-shape and size of *dimas*. The female is colored exactly like the male, but is larger.

The type specimen is from Castro, Parana, Brazil. Others are from the Guianas, Venezuela, Peru, Costa Rica, and Mexico. There is local variation in size and in the black dots on the fore wings. The Guiana specimens are the largest.

Type: No. 12524, U. S. National Museum.

Trosia beggoides, new species.

White, the wings smooth and silky. Costa of fore wing black. Head strongly tinged with yellow, the thorax and the abdomen less strongly so. Orbits, palpi, pectus, and all the tarsi black. Expanse, male 34 mm.; female 50 mm.

One male, one female, Castro, Parana, Brazil (E. D. Jones) and Nova Friburgo, Brazil (Schaus collection).

Type: No. 13109, U. S. National Museum.

Trosia euthula, new species.

White, with a faint creamy tint. Pectus and femora smoky black; antennæ testaceous. Expanse, male 24 mm.; female 30 mm.

Four males, three females, Sapucay, Paraguay (W. T. Foster).

Type: No. 13110, U. S. National Museum.

A small species, exactly like *Norape butleri* Baker, but a little less pure white and different in venation.

Trosia revocans Felder.

Endobrachys revocans Felder, Reise Novara, Lep., pl. lxxxiii, fig. 17, 1874.

Kirby strangely places this genus in the Notodontidæ. I have not any specimens of the species, but consider it plainly a *Trosia*, allied to *pulchella* Schaus.

Trosia jeanette, new species.

Vertex, thorax, and abdomen ocher yellow, disk of thorax dotted with white, the posterior tuft orange and yellow; front, pectus, and legs gray. Wings gray, a yellow ray from base through cell, diffused to costa subapically. Hind wing yellow at extreme base and along inner marginal. Expanse 30 mm.

Two males, St. Jean and St. Laurent, Maroni River, French Guiana (W. Schaus).

Type: No. 13111, U. S. National Museum.

Allied to *Trosia arpi* Schaus, but the hind wings have much more of gray, while the thorax posteriorly is more distinctly marked with red.

Trosia caramia, new species.

Body orange ocher, the abdomen shading to red dorsally; thorax posteriorly pink. Fore wing gray, overspread with ocherous brown, shading to red at base; a yellow ray from base to beyond end of cell, shading to pink beyond towards apex. Hind wing red at base and along inner margin, the area beyond the cell gray. Antennæ and tarsi black. Expanse 35 mm.

Four males, Rio Huacamaya, Carabaya, Peru (Schaus collection).

Type: No. 13112, U. S. National Museum.

Genus MESOSCIA Hubner.

Mesoscia Hübner, Verz. bek. Schmett., 194, 1816.

Hübner cites under this genus *semois* Cramer (recte *simois* Stoll, a cochlidian, genus *Natada*) and *pusilla* Cramer. Kirby designates the latter as the type. I have no specimen of *pusilla*, but Möschler gives the generic characters, and the species here recorded seem congeneric.

Mesoscia eriophora Sepp.

Phalæna eriophora Sepp, Surin. Vlind., pl. 21, 1848.

This species can not be a synonym of *pusilla* Stoll, as that has the body and hind wings red. This has these parts white, shaded with dark gray.

Angulinia Schaus, *lorna* Schaus, and *terminata* Schaus are congeneric.

Mesoscia mirabilis Schaus.

Trosia mirabilis Schaus, Proc. U. S. Nat. Mus., xxxix, 335, 1905.

It seems necessary to remove this species to *Mesoscia*, although with its red antennæ it looks like a *Hysterocladia*.

The costal edge is black. This must be near *Carama bella* Druce, unknown to me except by the description, but the vertex of the head is red in the present species.

Genus **EDEBESSA** Walker.

Edebessa Walker, Cat. Lep. Het. Brit. Mus., vii, 1755, 1856; type *purens* Walker.

Alimera Möschler, Verb. Zool.-bot. Ges. Wien., xxxii, 340, 1883; type *bicolor* Möschler.

Edebessa bicolor Möschler.

Alimera bicolor Möschler, Verh. Zool.-bot. Ges. Wein., xxxii, 340, 1883.

This species is not before me, but it is obviously very closely allied to *Edebessa langucinata* Schaus, of which I possess the female type.

Genus **RAMACA**, new. 167.

Proposed for *Mesoscia pascora* Schaus (Journ. N. Y. Ent. Soc., viii, 229, 1900) which differs from *Mesoscia* in having veins 4-5 of fore wing and 3-4 of hind wing connate. The antennæ are long. *Ramaca pascora* Schaus, type species.

Ramaca achriogelos, new species. 167

White; disk of thorax blackish. Fore wing with broad costal edge brown-black, outer and inner margins and fringe except at apex of same color, the inner border with a branch reaching up to cell at origin of vein 2. Expanse 29 mm.

One male, Southern Arizona (E. J. Osler).

Type: No. 13113, U. S. National Museum.

Very like *Noraþe tener* Druce, but differing in venation.

Genus **MALMIS**, new.

Proposed for *Megalopyge fieldia* Schaus (Journ. N. Y. Ent. Soc., iv, 58, 1896), which differs from *Megalopyge* in having the frenulum well developed. The antennæ are long. *Malmis fieldia* Schaus, sole species.

Genus **BEDALIA**, new.

Fore wing with veins 4 and 5 separate; hind wing with veins 3 and 4 connate; 6 and 7 remote; 8 anastomosing with the cell shortly near base; antennæ long.

Bedalia corops, new species.

Head, thorax, and abdomen dark brown, tufts at bases of antennæ white; antennæ with the shaft white, the pectinations pale testaceous;

legs brown, the long hairs on fore femora and tibiæ white. Wings light brown, the fore wings woolly toward the base; costa shaded with white to across the cell and an outer straight white line across wing; veins narrowly dark; two dark-brown spots at extreme base of wing. Hind wings without marks. Expanse 30 mm.

Two males, Castro, Parana, Brazil (Schaus collection).

Type: No. 13114, U. S. National Museum.

These specimens have been determined as the males of *Megalopyge vipera* Schaus, but incorrectly so.

Genus *PODALIA* Walker.

Podalia Walker, Cat. Lep. Het. Brit. Mus., vii, 1714, 1856; type, *vesta* Walker.

Gerontia Schaus, Trans. Am. Ent. Soc., xxx, 139, 1904; type, *omayena* Schaus.

Thoscora Schaus, Trans. Am. Ent. Soc., xxx, 140, 1904; type *brugea* Schaus.

The genus divides into two sections, those with white, spotted wings (typical) and those with brown wings and yellow abdomen (*Gerontia*). The peculiar venation of *Thoscora* Schaus is not constant.

Podalia orsilochus Cramer.

Bombyx orsilochus Cramer, Pap. Exot., pl. xli, fig. D, 1775.

Podalia vesta Walker, Cat. Lep. Het. Brit. Mus., vii, 1714, 1856.

Podalia dorsimacula Walker, Cat. Lep. Het. Brit. Mus., vii, 1717, 1856.

Megalopyge orsilochus Kirby, Cat. Lep. Het., 845, 1892.

The true *orsilochus*, from the Guianas, has black hind wings in the male. The southern race, *vesta* Walker, has a submarginal white band of sagittate spots.

Podalia major Schaus.

Podalia major Schaus, Proc. U. S. Nat. Mus., xxix, 338, 1905.

Very close to *orsilochus* and perhaps a race of it, yet the hind wings are entirely white, except for the area on the inner margin below the cell, while the markings of the fore wings are smoky gray. The markings, however, are identical with those of *orsilochus*.

Podalia albescens Schaus.

Megalopyge albescens Schaus, Journ. N. Y. Ent. Soc., viii, 229, 1900.

This is clearly a derivative of *orsilochus*, but distinct, the wings being less produced and the antennæ testaceous instead of black, besides the differences in coloration of the wings.

Podalia darca, new species.

Dark brown, the wings rather thinly scaled. Abdomen with dark yellow hair above, but the segments banded with blackish; abdomen below, legs, pectus, and front of head yellow. Expanse, male 35 mm., female 55 mm.

Three males, one female, Maroni River, French Guiana (W. Schaus).

Type: No. 13115, U. S. National Museum.

Allied to *Podalia brugca* Schaus, but of a darker brown, the abdomen less clear yellow.

Podalia megalodia, new species.

Thorax dark brown intermixed with pinkish, the vertex of the head pinkish. Abdomen pale brown with dark segmental rings. Fore wing dark brown streaked with whitish on costa and in cell, defining two dark-brown rays and a spot at the end of the cell; the whitish streaking predominates beyond the cell and defines an outer row of elliptical spots between the veins, the two lower of which are sagittate, being incised in the basal side by whitish loops, veins terminally and marginal spottings faintly pale. Hind wings dark brown, a little paler between the veins outwardly. Expanse 85 mm.

Four males, Rio Janeiro and Petropolis, Brazil (Schaus collection).

Type: No. 13116, U. S. National Museum.

I have not found any description of this large and conspicuous insect. The freuulum is partly degenerated, though there is still a small costal loop, while the thorax is not as prominent before the wings as in typical *Podalia*. The species is therefore transitional toward *Megalopyge*. The pattern of coloration, while similar to that of *orsilochus*, has considerably departed from it and suggests that of the *albicollis* group of *Megalopyge*.

Genus MEGALOPYGE Hubner.

Megalopyge Hübner, Verz. bek. Schmett., 185, 1816; type, *lanifera* Hübn. (*lanata* Stoll).

Gasina Walker, Cat. Lep. Het. Brit. Mus., vi, 1478, 1855; type, *albicollis* Walker.

Alpis Walker, Cat. Lep. Het. Brit. Mus., v, 1094, 1855; type, *defoliata* Walker.

Chrysopyga Herrich-Schaeffer, Ausser. Schmett., 6, 1855; type, *undulata* Herr.-Sch.

Ochrosoma Herrich-Schaeffer, Ausser. Schmett., 7, 1855; type, *apicalis* Herr.-Sch.

Zebonda Walker, Cat. Lep. Het. Brit. Mus., xxxii, 498, 1865; type, *basigutta* Walker.

This genus contains a large number of species, some of which I have discussed in separate articles.

Genus *VESCOA*, new.

Legs rather slender, the tibiæ without spurs; palpi very short, not reaching the front; tongue obsolete; antennæ short, with long bipeccinations in the male, reaching to the tip; eyes large, globose; body parts moderate, the abdomen very short. Wings rounded, trigonate; fore wing with vein *1c* present, straight, continuous; 2 to 5 well separated; 3 to 5 evenly spaced, the cross-vein of the cell angularly reëntrant, the discal vein touching the point and not forked; 6 from much below the angle of the cell; 7 and 8 long-stalked; 9 near the base of the stalk; 10 absent; 11 from the outer fourth of the cell, anastomosing with 12, the cell long; hind wing with veins 3 to 5 evenly spaced; cell with a reëntrant cross-vein as on fore wing; 6 from much below angle of cell; 8 anastomosing with the cell to very near the apex; frenulum of the male distinct, with a narrow costal loop on fore wing.

Vescoa ma, new species.

Head and thorax white, abdomen gray. Fore wing dark gray, all the veins, the fringe, and inner margin narrowly white. Hind wing white with gray streaks between the veins outwardly. Expanse 15 mm.

One male, Iquitos, Peru, July 17, 1906 (B. A. Griggs).

Type: No. 13127, U. S. National Museum.

This peculiar dwarf species is remarkably small for a megalopygid, looking rather like a cochliidiid. The venation, however, refers it clearly to the former family. The only other small and degenerate genus in the family is *Cyclara* Schaus, which is not so small as this and apparently derived from *Megalopyge*, whereas *Vescoa* is allied to *Norape* and the other white forms.

A CORRECTION

For *Psen (Mimesa) erythropoda* on page 102 of the June number of the Proceedings read *Psen (Mimesa) erythropoda*.